



Overview of the SEED™ Token & Network

The future of AI relies on Conversational User Interfaces.

Conversational User Interfaces (CUIs) are the front-end to the back-end AI technologies that will change every industry, application, and service in the near future. CUIs are a more natural way to interact with computers and systems. We won't continue to tap and type on little screens but, instead, speak with digital services. These are already growing at a rapid pace (already outnumbering people on the Internet) and becoming the preferred interface to AI technologies and services. As AI grows, so will CUIs, impacting every interface and computing system in a way similar to the replacement of command-line interfaces with graphic user interfaces in the last decades of the 20th Century. As with GUIs, the explosion of CUIs will transform every industry and service and usher-in new applications for users and new opportunities for developers and organizations.

Conversational User Interfaces are difficult to build.

Currently, CUI tools and protocols are typically proprietary and under-developed, making bot creation, deployment, and management difficult. This limits the market's ability to scale and realize its full potential as a mature CUI and AI economy. Without a common medium of communication and value exchange, the industry's growth will be retarded, making it difficult for all but the biggest corporations to effectively create and deploy CUIs. This would isolate these new technologies and their opportunities outside the reach of individuals and companies small and large), further retarding innovation, ownership, and access for both developers and (more importantly) users. AI services are offered by very large corporations that require developers and service providers to subsume their brands under these large companies' AI brands (such as Alexa, Siri, etc.). **We can't allow such critical technologies and services to be owned only by a handful of very large multinationals.**

- CUI architectures must be designed to manage conversation, address context, and exhibit socially-appropriate behaviors. They need to be multi-modal: capable of communication in text, audio, video, and animation.
- CUI platforms must remember and learn from users' past conversations while communicating across an array of clients and third party services (from language processing to user context) within an appropriate social context.
- Most importantly, encryption and authentication of CUIs is required to establish privacy and trust, including sharing personal information on sensitive topics such as health and finances.
- Marketplaces can amplify the value of engineering and design efforts by allowing compatible components of all kinds to be sold across the industry and customized, as needed.
- Ratings and reviews of CUIs and components that reward good CUI actors and developers would strengthen trust and reduce the influence of bad actors in the ecosystem.

SEED Establishes A Blockchain-Based CUI Ecosystem With More Opportunities for Growth. SEED will be the preferred mechanism for authentication and exchange of value between CUIs.

SEED tokens create an economy around creating, distributing, and licensing CUI functions, components, and services. The SEED token and protocol enables an open, independent, peer-to-peer platform for conversational interfaces fronting AI technologies on the blockchain. The SEED token will cryptographically-secure digital tokens and integrate **Botanic Technology's™ Multi-modal CUI Framework** (and others' CUI technologies, in the future).

We believe recording all transactions on a blockchain is the best way to establish trust through transparency (of transactions, but not of personal data) and help the CUI economy grow as CUIs become the preferred way for people to interact with computing systems.

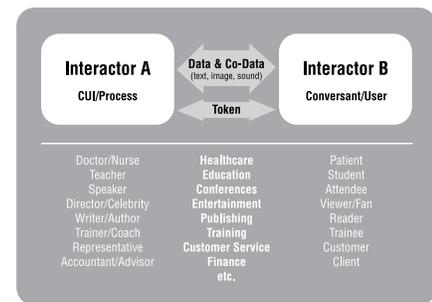
Any CUI developer can use SEED to share, buy, and sell digital agents, 2D and 3D avatars, component assets, and services in a variety of markets on the SEED Network. These CUIs and components may be found, ranked, and exchanged in a manner similar to app stores. In addition, Botanic is open-sourcing its existing API aggregation middleware, clients, servers, libraries, protocols, data structures, tools, patents, and other IP in order to supercharge an open industry standard for development of CUIs. This will all be financed by the sale of SEED tokens undertaken by Seed Vault Ltd.™

seedtoken.io

Gartner already predicts that CUIs will grow to over \$20B by 2021 (up ten times from today).

- AI will impact 47% of jobs by 2025.
- By 2020, 25% of customer service and support operations will integrate virtual customer assistant technology across engagement channels, up from less than 2% in 2015.
- 85% of users are more likely to follow directions from an AI than a person — especially when it comes to health care.
- By 2020, Artificial intelligence to be top investment priority for 30% of CIOs.
- The use of virtual customer assistants (VCAs) will jump by 1,000% by 2020.

Gartner Report: Enterprises Must Prepare 'Now' for the Disruptive Power of Conversational AI Platforms, Published: 13 March 2017 ID: G00327554, Market Guide for Virtual Customer Assistants, Published: 23 November 2016 ID: G0029181, Relational Agents: Effecting Change through Human-Computer Relationships by Timothy Wallace Bickmore, <http://affect.media.mit.edu/pdfs/03.bickmore-phd.pdf>, Gartner Predicts 2017: Artificial Intelligence

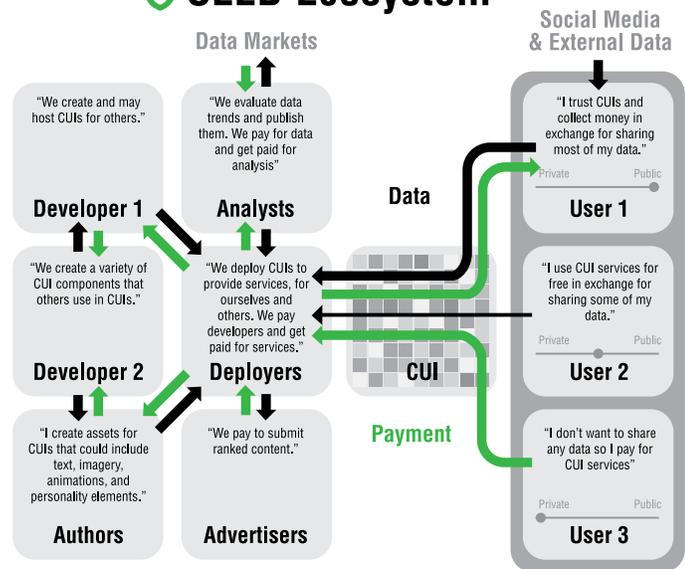


The SEED Ecosystem Enables Ethical CUIs & AI.

The SEED Token and Network are unique because they are CUI-specific. In addition, they are comprised of communities and companies from across the converging worlds of AI, VR, AR, voice, video, and blockchain. This enables an exchange of valuable data and interoperability that these siloed industries do not currently enjoy. With SEED, not only can the token enable developers to earn value for the components they share and sell in the marketplaces but also with end-users who converse with CUIs. **Users can be remunerated for the data they share through CUIs as well as data created as a result of these interactions, including new, currently unmeasured forms, like emotions and intonation.** SEED serves as a democratizing force in two-way value creation, built on a trustable foundation of conversational interaction that balances public and private data. The core remuneration model is based on backlinking a chain of licensed properties rewarding the original authors of any asset whenever it is used, increasing the value they receive for their work and speeding the development of CUIs for all. Smart contracts govern the terms related to licensing, transferring, subscribing, revenue sharing, and other transactions.

A peer-to-peer application will be developed by SEED Vault Ltd.™ to allow developers and users, alike, to interact fully with the SEED network.

SEED Ecosystem



Roadmap for the Development of the SEED Platform:



Seed Vault will demonstrate the technology, including utility of the token, with a CUI and bot store. Following funding, Seed Vault will open-source the specified intellectual property; complete the blockchain and network development; roll-out the SEED platform; and deploy CUI marketplaces ("Bot Stores"). In addition to engineering projects, Seed Vault will establish developer programs and contests, developer relations and investments, and develop and support SEED-engaged communities in order to further add new tools, IP, and content to the platform and enhance the value of both the platform and the token.

The SEED project is evolving from Botanic Technologies.

Founded in 2011, and based in San Francisco, CA (EIN 81-5404521) Botanic creates the tools to deploy multi-modal, trusted AI personalities for clients, including Microsoft, Skype, and Logitech. Its experts are lending their experience, frameworks, code, intellectual property, and technical resources to the SEED project. **Much of this IP (including key patents and source code) will be licensed to Seed Vault Ltd for use by the SEED community under a Creative Commons license.**

Seed Vault Ltd is a Singapore-based non-profit foundation focused solely on extending and supporting the SEED community and build value for the SEED token.

Seed Vault is managed by a board of trustees and will create a governance structure of rotating trustees with specific oversight in the areas of bots and CUIs, security, digital currencies, compliance, and economics. When trustees are up for rotation, SEED holders will vote for trustee candidates.

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